The “Ban the Burn at Every Turn” Act

Since 2017, City Council has unanimously passed seven resolutions and the Baltimore Clean Air Act, all aiming to move the city away from incineration and toward Zero Waste. However, new incinerator companies continue to try to locate in Baltimore, and the threat remains of the city signing a new long-term contract to extend the life of the 35-year old Wheelabrator trash incinerator beyond the life span of any such facility in the nation. Allowing Wheelabrator to operate beyond 2021 when its current ends would be very costly in health, environmental, and economic terms. The “Ban the Burn at Every Turn” Act would prohibit the city from contracting with any form of waste incinerator, and closes any loopholes to ensure that all types are covered.

Incinerators:

Conventional waste incinerators like Wheelabrator Baltimore (BRESCO) are covered in §41-4(A)(2)(I)(A). Trash incineration is the most expensive and polluting way to manage waste or to make energy, and Wheelabrator is Baltimore’s #1 air polluter, and would still be so even if they were to comply with the Baltimore Clean Air Act and dramatically reduce their air pollution.

Gasification and pyrolysis are two-stage incinerators, described in §41-4(A)(2)(I)(B). These types of incinerators use heat and pressure to turn waste into a gas in the first step, then typically burn the gas in a second stage. When they do so, EPA’s legally defines them as incinerators, even though the industry likes to insist that they are not incinerators by focusing on the lack of burning in the first stage. These can be just as polluting as normal incinerators, but often have fantastic claims to the contrary. Despite the technology being around for decades, there are no commercial-scale waste gasification or pyrolysis plants in the U.S. Geosyntec’s recent solid waste plan for the city does not recommend it, and admits that this technology is untested, unproven, costly, and is not designed to work on trash.

Waste to Fuels (WTF)

Waste-to-fuels facilities, described in §41-4(A)(2)(I)(C), are those that make waste into a burnable fuel usually to be burned elsewhere. When Energy Answers tried to build the nation’s largest waste incinerator in Curtis Bay, they got around a state ban on incinerators within one mile of a school by arguing that they were not an incinerator, but a power plant burning “refuse-derived fuel” or RDF (pictured on right). RDF is just trash with glass and metal removed, and compressed into a pellet. The Act would prevent the city from contracting with an RDF plant that would market processed trash to be burned. Similarly, tires and sewage sludge are sometimes shredded or pelletized and marketed as fuel the same way, often to burn in cement kilns, paper mills, or coal power plants – all of which are regulated even less than normal incinerators. Some experimental waste-to-fuels facilities seek to convert waste into liquid fuels instead.

Exemptions

The Act does not limit the use of landfills because of their gas collection systems where landfill gas is usually burned for energy. It also does not limit the use of anaerobic digestion, which is often used for sewage sludge and sometimes food waste. Anaerobic digestion is like composting, but within a vessel, so that methane is generated, captured, and burned for energy. Since the waste is not directly burned in either of these processes, it’s far less polluting, and is not a concern. In fact, anaerobic digestion is a preferred method to treat sewage sludge and the organic fraction of trash before landfills it, to avoid gas and odor issues at landfills. The Act also allows the Board of Estimates to make an exception if there are types of waste that the state requires to be incinerated, which, at this time, appears to be none.
Life After Wheelabrator

Where will our trash go??

Wheelabrator is now 35 years old. With a new 5-10 year contract to continue burning after 2021, the incinerator would be operating until the ripe old age of 41-46. Only one incinerator in the country has made it past the age of 40 without being completely rebuilt. The average lifespan of the 39 trash incinerators that have closed since 2000 is just 22 years old. Much younger incinerators, like the one in Montgomery County, are facing increasing operations and maintenance costs from disrepair and things breaking down. It’s unreasonable to invest $95 million in air pollution controls for a facility at the end of its life that will only get more costly.

Baltimore is fortunate in that it has its own publicly-owned landfill: Quarantine Road Landfill (QRL). Most cities have to rely on private facilities outside of their borders to take their trash. One major difference between public and private facilities is that public ones can choose not to take trash from outside of their borders.

Where will Baltimore’s trash go if Wheelabrator closes? The city’s own landfill.

But aren’t landfills bad? Yes. Of course. However, there’s a landfill at the end of the picture no matter what. We have three main options:

1. **Direct landfilling** (bad, but better than incineration)
2. **Incineration \(\rightarrow\) toxic ash to landfill** (most polluting and expensive option)
3. **Zero Waste with Material Recovery & Biological Treatment before landfill** (best option, economically & environmentally; avoids having gassy, stinky landfills)

   *Material recovery means pulling out more recyclables from what people throw in the trash. Biological treatment means stabilizing the organic fraction in the trash so that it breaks down in a controlled environment like a digester where gases can be collected.*

Landfills are bad, but incinerators are worse. For every 100 tons burned in an incinerator, 30 tons become toxic ash that go to the landfill. The other 70 tons become air pollution. It’s not the size of landfills that is harmful, but the toxicity. Ash makes landfills more toxic.

Won’t the landfill fill up faster if we don’t burn? Yes, but not by much because we no longer have to take other people’s trash and ash – and we can and must reduce waste!

With the right policies and programs in place, Wheelabrator can close on 12/31/2021 when the current contract ends, the city’s Quarantine Road Landfill will have room until the planned expansion is ready (projected for 2026), and the expanded landfill can last until at least 2040 without needing a new transfer station to export trash to PA and VA landfills.
How to fill up Quarantine Road Landfill as slowly as possible:

1) **Stop importing waste:** In 2019, 62% of Wheelabrator’s trash came from the city. 28% was imported from Baltimore County, and the rest from 5 other MD Counties, and 6 states (NC, NJ, WV, OH, PA, & GA). From day one of ending the relationship with Wheelabrator, we can stop importing trash and filling the landfill with ash from other communities.

2) **City’s landfill is expanding, anyway:** An expansion of the Quarantine Road Landfill is already in the works, and has been going through permitting processes with the state for over six years now. It’s been planned because it’s filling up with Wheelabrator’s ash, and the expansion would be needed even if Wheelabrator stayed open. DPW has stated that the expansion will be ready by 2026. It’s taking this long only because DPW has dragged their feet. It doesn’t take 12 years to permit and build a landfill expansion, unless there is community opposition slowing it down. There is no opposition to this expansion. Once it’s ready, the city will have about 10-25 years of additional landfill capacity, depending on how successful the city is in reducing waste to slow down the pace of filling the landfill.

3) **Some waste is already exported:** There are five transfer stations serving the city already. In 2018, 12% of the city’s waste was exported, mainly to landfills in PA and VA. If the city fails to reduce waste effectively before the QRL expansion is ready, this existing infrastructure can be used to export just enough waste to bridge the gap without building an expensive new transfer station.


5) **Plastic bans:** The city passed a polystyrene ban, and could continue to ban problematic materials like single use plastics, dramatically reducing waste.
6) **Get the bins right!** The city gave everyone large green trash bins, but charges for small yellow recycling bins. This is the wrong size, color, and cost. DPW is finally poised to provide free recycling bins to city residents. They must be the largest of the bin sizes, and should be blue to match the common color scheme used elsewhere. Experience from other cities has shown that the size of the bins matters, and that collecting trash once every two weeks is an effective way to get people to compost (with composting and recycling collected weekly). San Francisco uses 64-gallon blue recycling bins, 32-gallon green composting bins, and 16-gallon black trash bins as pictured.

7) **Unit Pricing (pay per bag/bin):** The most effective, and cost-effective¹, way to quickly reduce waste is known as “Pay as You Throw” (PAYT) or “Save as You Throw” – where you pay for each bag of trash you put out, but recycling and composting are collected for free. 10,000 communities in the U.S. do this. Where they do, they find an immediate 44% reduction in the amount of trash sent to disposal. It even encourages reduction, as there is a 28% decrease in total discards (waste plus recycling).² Nothing works better, and it’s only fair. With electricity, gas, and water, we pay for how much we use. However, with waste, our neighbor can put out 10 bags a week and pay the same as you do if you put out just one. The city needs to focus on how to adopt Save as You Throw ASAP, including for multi-family residents. Montgomery County is exploring this, and heard great presentations by SERA and Waste Zero. Increased illegal dumping is rare and temporary, and can be solved by providing better bulk item pickup service.

8) **Curbside composting collection:** Composting food scraps and yard waste can reduce waste 25-30% while also avoiding landfill gas generation that contributes to odors and global warming. To get people composting food scraps, you need to have trash picked up every two weeks, and composting and recycling weekly. People get the point when they notice that what stinks in their trash is the food scraps, and if they want it not to stink, they need to put it in the proper bin that is collected more often.

9) **Deconstruct, don’t demolish:** Construction and demolition waste is the single largest waste stream. More jobs and less waste comes from carefully dismantling buildings rather than demolishing them. DPW’s study agrees (see p.48), calling for a city-wide deconstruction mandate in place of demolition, to reuse and recycle building materials. We can also require use of recovered/recycled materials in new construction.

¹ [https://www.montgomerycountymd.gov/SWS/Resources/Files/master-plan/pay-as-you-throw-sera.pdf](https://www.montgomerycountymd.gov/SWS/Resources/Files/master-plan/pay-as-you-throw-sera.pdf) – see slide 5 (top right on p2)
² [https://www.montgomerycountymd.gov/SWS/Resources/Files/master-plan/pay-as-you-throw-waste-zero.pdf](https://www.montgomerycountymd.gov/SWS/Resources/Files/master-plan/pay-as-you-throw-waste-zero.pdf) – see slides 8 and 17. Slide 8 shows the immediate drop in waste disposal of 44% on average, and shows the results from Sanford, ME, where waste disposal fell dramatically upon starting PAYT, rose again once it was canceled, then dropped again once it was re-adopted. Slide 17 shows that it’s not just shifting waste to recycling, but as waste disposal drops 44%, waste plus recyclables also drops 28%, showing the impact of PAYT on people reducing consumption.
What does it all cost??

Incineration is widely understood to be more expensive than landfilling, even by the admission of two waste industry trade associations (including the incinerator industry’s trade association), plus an industry admission in the Baltimore Clean Air Act lawsuit filings. See here.

Public sector assets like Quarantine Road Landfill or new city-owned recycling and composting infrastructure are cheaper than using privatized services where companies have to turn a profit for shareholders.

Zero Waste solutions are cheaper than any form of disposal.

**Current and Expected Tip Fees**

- **$56.33/ton** 2020 cost of disposal at Wheelabrator under current contract
- **$67.50/ton** Projected cost of Quarantine Road Landfill (leaving 30% of the airspace in contingency for emergency use)
- **$71.00/ton** Cost of a new 10-year contract with Wheelabrator
- **$84.00/ton** Cost of a new 5-year contract with Wheelabrator

If the city signs new contracts with Wheelabrator, and it includes the $95 million cost of new air pollution controls, city taxpayers will be on the hook for the cost of Wheelabrator’s upgrades. The cost of continuing to use Wheelabrator’s incinerator will likely be higher than projected by Geosyntec (above) because:

- Wheelabrator will insist that the $95 million cost of pollution upgrades will need to be covered by a guaranteed commitment of waste. If the city won’t agree to a “put-or-pay” clause that ensures Wheelabrator is paid even if the city doesn’t provide the waste, then Wheelabrator will need to charge more and take a risk they’re unlikely to take.
- Baltimore County is Wheelabrator’s 2nd largest waste customer after the city, and is moving away from sending waste to Wheelabrator. Wheelabrator is currently suing Baltimore County for $32 million for not providing enough waste to their incinerator. If the county stops using Wheelabrator, Wheelabrator will have to recoup the cost of controls from the city to be able to lower its prices to attract waste from other communities.
- Baltimore City is planning to reduce waste by up to 90% by 2040. If the city is successful is reducing waste in the next 5-10 years, there won’t be enough tipping fee revenue for Wheelabrator to cover the cost of their expensive pollution upgrades, and Wheelabrator will seek to have the city cover this by other means in any new contract.
- The city pays about $11 million a year to Wheelabrator in tipping fees. Another $95 million equates to nearly 10 years of the current cost of burning trash. A ten year contract could roughly double the city’s disposal costs.
- The incinerator is already near the end of its life. Operations and maintenance costs as old incinerators break down become prohibitive. Connecticut just decided they need to retire their largest incinerator because the cost to refurbish it is $333 million that the state and towns cannot afford. We cannot expect the 35-year old Wheelabrator incinerator to make it into its 40s without incredible cost.
- The **health consequences** of using incineration are not factored into this, but **asthma**, cancer, and **early deaths** from breathing fine particulate matter (which also contributes to increased COVID-19 deaths) amounts to at least tens of millions of dollars a year in economic harm.

See [Draft Recycling and Solid Waste Management Master Plan](#), June 2020, pp. 63 & 76.